

IN THE CLAIMS:

1. (Currently Amended) A content transmission device that receives and converts digital broadcast data containing a multiplexed plurality of contents, and transmits the converted data, the content transmission device comprising:

a storing unit operable to store a plurality of processing models in correspondence
5 with pieces of identity information, each processing model including composition information indicating a composition of the contents, normal-case conversion processing information for when the received broadcast data is normal, and irregular-case conversion processing information for when irregularity has been detected in the received broadcast data;

an acquisition unit operable to acquire one piece of identity information from an
10 external device that manages a transmission schedule for the broadcast data;

a reception unit operable to receive the broadcast data;

a selection unit operable to select the processing model corresponding to the
acquired piece of identity information;

a detection unit operable to detect a received broadcast data portion whose
15 composition differs from the composition information in the selected processing model;

a conversion unit operable to carry out, based on a detection result and the
selected processing model, normal-case conversion processing on a portion of the received
broadcast data whose composition matches the composition information, and irregular-case
conversion processing on the portion of the received broadcast data whose composition differs
20 from the composition information, and irregular-case conversion processing corresponding to the
normal-case conversion processing in accordance with the one piece of identity information that

has been acquired wherein the conversion unit outputs an empty carousel when irregularity has been detected in the irregular-case conversion processing; and

a transmission unit operable to transmit the converted data.

2. (Original) The content transmission device of Claim 1,

wherein the normal-case conversion processing is processing for replacing, with a different content, at least one of the plurality of contents indicated in the composition information, and

5 the irregular-case conversion processing is processing for replacing, with another content, a content in which irregularity has been detected based on the composition information.

3. (Original) The content transmission device of Claim 1,

wherein the storing unit further stores an irregular-case processing model that is not in correspondence with a piece of identity information,

the irregular-case processing model indicates a composition of the contents that
5 are included in data to be transmitted,

the detection unit further judges whether or not the proportion of contents different from the composition information is greater than a reference level,

the conversion unit replaces, when the reference level is judged to have been exceeded, the received broadcast data with replacement broadcast data indicated by the irregular-
10 case processing model, and

the transmission unit transmits the replacement broadcast data.

4. (Original) The content transmission device of Claim 3,

wherein the reception unit receives broadcast data continuously, and

when the detection unit detects that the proportion of the contents different from the composition information is less than the reference level, the conversion unit suppresses the conversion of broadcast data indicated by the irregular-case processing model, and converts the broadcast data based on the selected processing model.

5. (Original) The content transmission device of Claim 1,

wherein the detection unit detects irregularity if (i) a content differing from the contents indicated in the composition information is received, or (ii) a portion of contents included in the contents indicated by the composition information is not received.

6. (Original) The content transmission device of Claim 1,

wherein the pieces of identity information are triggers generated by an APS (Automatic Programming System).

7. (Original) The content transmission device of Claim 1, further comprising:

an output unit operable to notify an operator of the content transmission device of the detection result from the detection unit.

8. (Original) The content transmission device of claim 1, wherein the broadcast data is received in packet form, a packet ID is attached to each packet,

the composition information contains the packet IDs scheduled for reception, and the detection unit detects when the packet ID of any received packet differs from the packet IDs in the composition information.

9. (Original) The content transmission device of Claim 8, wherein each packet includes a CRC value,

the detection unit further judges whether or not the CRC value of each packet is correct, and judges a packet to be irregular when the CRC value is judged to be incorrect, and

5 the conversion unit carries out irregular conversion processing on the one or more packets that are irregular.

10. (Original) The content transmission device of Claim 9,
wherein each packet has a respective packet ID attached,
the composition information contains the packet IDs that are attached to packets
scheduled to be received, and

5 the detection unit detects, among the packet IDs of the received packets, any packet IDs that differ from the packet IDs in the composition information, and judges any packets having the differing packet IDs to be irregular.

11. (Original) The content transmission device of Claim 1,
wherein the contents are made up of a plurality of modules,
the irregular-case conversion processing is replacement, with another module, of a
module in which irregularity has been detected, and

5 the detection unit judges whether or not any portion of the received modules fails to meet a judgment requirement indicating a normal module, and when an irregular portion is present in a module, judges the module to be irregular.

12. (Original) The content transmission device of Claim 11,
wherein the modules are received in packet form, and
with the judgment requirement being that the packets of the module are complete,
the detection unit detects a module to be irregular when the packets are incomplete.

13. (Original) The content transmission device of Claim 11,
wherein each module includes a module length expressing a data length of the
module,

the judgment requirement is that the module length matches the actual data length
5 of the received module, and

the detection unit, when the data length of the received module fails to match the
module length, judges the module to be irregular.

14. (Original) The content transmission device of Claim 1,
wherein the broadcast data is in an IP (internet protocol) transport stream format.

15. (Original) The content transmission device of Claim 1,
wherein the broadcast data is transmitted in file format from another device.

16. (Original) The content transmission device of Claim 1,
wherein the broadcast data is in MPEG-2 transport stream format.

17. (Currently Amended) A content conversion method used for a content
transmission device that receives and converts digital broadcast data containing a multiplexed
plurality of contents, and transmits the converted data, the content transmission device including
a storing unit operable to store a plurality of processing models in correspondence
5 with pieces of identity information, each processing model including composition information
indicating a composition of the contents, normal-case conversion processing information for
when the received broadcast data is normal, and irregular-case conversion processing
information for when irregularity has been detected in the received broadcast data, and

the content conversion method comprising steps of:

10 an acquisition unit acquiring one piece of identity information from an external device that manages a transmission schedule for the broadcast data;

 a reception unit receiving the broadcast data;

 a selection unit selecting the processing model corresponding to the acquired piece of identity information;

15 a detection unit detecting a received broadcast data portion whose composition differs from the composition information in the selected processing model;

 a conversion unit carrying out, based on a detection result and the selected processing model, normal-case conversion processing on a portion of the received broadcast data whose composition matches the composition information, and irregular-case conversion
20 processing on the portion of the received broadcast data whose composition differs from the composition information, the irregular-case conversion processing corresponding to the normal-case conversion processing in accordance with the one piece of identity information that has been acquired wherein the conversion unit outputs an empty carousel when irregularity has been detected in the irregular-case conversion processing; and

25 a transmission unit transmitting the converted data.

18. (Cancelled)

19. (Currently Amended) A computer readable recording medium on which is recorded a content conversion program used for a content transmission device that receives and converts digital broadcast data containing a multiplexed plurality of contents, and transmits the converted data, the content transmission device including

5 a storing unit operable to store a plurality of processing models in correspondence
with pieces of identity information, each processing model including composition information
indicating a composition of the contents, normal-case conversion processing information for
when the received broadcast data is normal, and irregular-case conversion processing
information for when irregularity has been detected in the received broadcast data, and
10 the content conversion program comprising program code operable to cause:
 an acquisition unit to acquire one piece of identity information from an external
device that manages a transmission schedule for the broadcast data;
 a reception unit to receive the broadcast data;
 a selection unit to select the processing model corresponding to the acquired piece
15 of identity information;
 a detection unit to detect a received broadcast data portion whose composition
differs from the composition information in the selected processing model;
 a conversion unit to carry out, based on a detection result and the selected
processing model, normal-case conversion processing on a portion of the received broadcast data
20 whose composition matches the composition information, and irregular-case conversion
processing on the portion of the received broadcast data whose composition differs from the
composition information, the irregular-case conversion processing corresponding to the normal-
case conversion processing in accordance with the one piece of identity information that has
been acquired wherein the conversion unit outputs an empty carousel when irregularity has been
25 detected in the irregular-case conversion processing; and
 a transmission unit to transmit the converted data.

20. (New) The content transmission device of Claim 1,
wherein the empty carousel is defined by the ARIB (Association of Radio
Industries and Business) standard.
21. (New) The content transmission device of Claim 1,
wherein the empty carousel refers to a transmission method using a data broadcast
which is empty of content.